# REMARKS

Reconsideration of the above-identified patent application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-24 are in this case. Claims 1-6, 9, 12, 13-18, 21 and 24 have been rejected under § 103(a). Claims 7, 8, 10, 11, 19, 20, 22 and 23 have been objected to. Dependent claims 7, 10, 11, 19, 22 and 23 have been canceled. Dependent claims 8 and 20 have been amended New independent claims 25-30 have been added.

The claims before the Examiner are directed toward a method and device for static rate flow control. First and second data packets, with respective lengths, share a common destination address on a network. When the first packet is transmitted, an entry is placed in a flow control table, and a timeout period for the entry is set, responsive to the length of the first packet. The second packet is transmitted only after the expiration of the timeout period.

## § 103(a) Rejections – APA in view of Attanasio et al. '017

The Examiner has rejected claims 1-6, 9, 12, 13-18, 21 and 24 under § 103(a) as being unpatentable over Applicant's admitted prior art in view of Attanasio et al., US Patent No. 5,918,017 (henceforth, "Attanasio et al. '017"). The Examiner's rejection is respectfully traversed.

The Examiner proposes that the present invention, as recited in independent claims 1 and 13, is an obvious combination Applicant's admitted InfiniBand™ prior art with the use by Attanasio et al. '017 of a stale timeout for an entry in a connection table. Applicant respectfully disagrees. As stated on the last line of page 1 of the specification of the above-identified patent application, the InfiniBand™ prior art of which the present invention is an improvement is a method of *static* rate control. By

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contrast, the teachings of Attanasio et al. '017 are directed at *dynamic* allocation of resources. That the teachings of Attanasio et al. '017 are directed at dynamic allocation of resources is abundantly clear, both from the statement of the problem to be solved, in column 1 lines 47-49:

> The prior art has shown that there is a need for dynamic allocation of resources. See, for example, Evaluating Management Decisions via Delegation, German Goldszmidt and Yechiam Yemeni, The Third International Symposium on Integrated Network Management, San Francisco, Calif., April 1993. An EC provides a single system image of a collection of services, typically over a collection of hosts. However, actual installations may require that services be allocated according to specific user policies, which can be dynamic. For example, a specific subset of the hosts may be allocated for secure transactions on a merchant Web server, while video on demand services is supported by another subset of hosts which include specialized hardware. (emphasis added)

and from the description of the invention in column 3 lines 44-66:

> The Manager **320** component implements connection allocation policies and enables dynamic configuration of the virtual encapsulated clusters. The Manager monitors and evaluates the current load on the members of each encapsulated cluster via a dynamic feedback control loop. The Manager implements connection allocation policies that perform intelligent spreading of incoming connections across the virtual encapsulated cluster servers to speed up the service of client requests. The new weight assignments are computed via a Manager algorithm that can be configured by the cluster administrators. The inputs of this decision algorithm for weights assignment include evaluated load metrics, and administrator configurable parameters such as time thresholds. Incoming connections are dynamically allocated to each VEC based on the above inputs ensuring that the cluster resources are allocated to provide fastest service to the clients. The Manager also includes a command interface which is used by administrators to dynamically configure the virtual encapsulated clusters. A more detailed description of the Manager is presented in Section 3. (emphasis added)

and in column 6 lines 51-63:

> The Connection-Router-Manager (Manager **320**) invention is a method and apparatus for dynamically distributing incoming connections using several load metrics according to a configurable policy. The Manager provides a control loop that dynamically modifies the weights of the Executor **340** routing algorithm to optimize the allocation of cluster resources. The goal of this invention is to improve

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> the overall throughput of the cluster and to reduce the aggregate delay of the service requests, by distributing incoming TCP connections according to the current state of the cluster. Hence, this invention describes a method to distribute the connections to the server hosts that improves the utilization of the servers and reduces the delay of serving the requests. (emphasis added)

Therefore, one *ordinarily* skilled in the art would not seek guidance in the teachings of Attanasio et al. '017 in implementing static flow control according to the InfiniBand™ protocol.

It follows that independent claims 1 and 13 are allowable in their present form. It further follows that claims 2-6, 9, 12, 14-18, 21 and 24 that depend therefrom also are allowable.

## Objections

The Examiner has objected to claims 7, 8, 10, 11, 19, 20, 22 and 23 as being based on rejected base claims. The Examiner has noted that claims 7, 8, 10, 11, 19, 20, 22 and 23 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim.

Claim 7 has been rewritten in independent form as new claim 25. Correspondingly, claim 7 has been canceled and claim 8 has been amended to depend from claim 25.

Claim 10 has been rewritten in independent form as new claim 26. Claim 11 has been rewritten in independent form as new claim 27. Correspondingly, claims 10 and 11 have been canceled.

Claim 19 has been rewritten in independent form as new claim 28. Correspondingly, claim 19 has been canceled and claim 20 has been amended to depend from claim 28.

Claim 22 has been rewritten in independent form as new claim 29. Claim 23 has been rewritten in independent form as new claim 30. Correspondingly, claims 22 and 23 have been canceled.
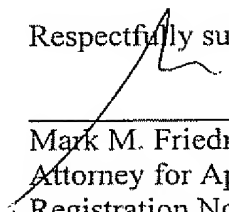
## Amendments to the Specification

Figures 1 and 2 have been corrected as required by the Examiner. Attached please find replacement Figures 1 and 2. In replacement Figure 1, item 34 now is labeled as "high-rate link" and item 38 now is labeled as "low-rate link". In replacement Figure 2, item 44 now is labeled as "output buffer", item 44 now is labeled as "packets generated by HCA 24" and item 46 now is labeled as "flow control attributes".

An inadvertent typographical error has been corrected on page 7 line 28. No new matter has been added.

In view of the above amendments and remarks it is respectfully submitted that independent claims 1, 13 and 25-30, and hence dependent claims 2-6, 8, 9, 12, 14-18, 20, 21 and 24 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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